

Results: Phylogenetic trees showed that there was no specific clustering between PR's env gene versus those in SPs. In V3 region, GPGQ motifs were found in all SPs and predicted phenotype of SPs were all NSI, while V3 region of PRs evolved more rapidly. There was deglycosylation of env V3 sequence of HIV-1 subtype CRF01_AE infected PRs, whereas it was conserved in SPs. Positive selective pressure operated only on env V3 region in PRs and this reflected nonsynonymous substitution accumulation on env V3 region in PRs.

Conclusions: These findings showed that the host immune responses may be one selective pressure driving sequence changes in V3 region in PRs.

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FOUNDATIONS FOR A PHASE III HUMAN IMMUNODEFICIENCY VIRUS VACCINE TRIAL: A DECADE OF THAI-U.S. ARMY COLLABORATIVE RESEARCH

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As part of the response of the Royal Thai Army to the outbreak of human immunodeficiency virus (HIV) in Thailand, a collaboration was established with the U.S. Army to jointly work toward the development of vaccines for the prevention of HIV infection. During the first decade of this collaboration, studies have been carried out in the diverse disciplines that are crucial to providing the foundations for efficacy trials of candidate HIV vaccines. Studies of host, pathogen, and vaccine interventions included studies of viral diversity, epidemiology, disease course, potential vaccine cohorts, and Phase I/II clinical trials. Collaborations were expanded to other Thai institutions and to overseas partners, resulting in the Thai AIDS Vaccine Evaluation Group. The efforts of these collaborations resulted in the development of candidate vaccines specifically designed for use in Thailand, and sequential evaluations that have lead to the threshold of the world's next and largest efficacy trial of HIV vaccines.

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HLA CLASS I SEROTYPES AND CYTOTOXIC T-LYMPHOCYTE RESPONSES AMONG HUMAN IMMUNODEFICIENCY VIRUS-1-UNINFECTED THAI VOLUNTEERS IMMUNIZED WITH ALVAC-HIV IN COMBINATION WITH MONOMERIC GP120 OR OLIGOMERIC GP160 PROTEIN BOOSTING

Paris R, Bejrachandra S, Karnasuta C, Chandanayingyong D, Kunachiwa W, Leetrakool N, Prakalapakorn S, Thongcharoen P, Nittayaphan S, Pitisuttithum P, Suriyanon V, Gurunathan S, McNeil JG, Brown AE, Birx DL and de Souza M

Antigen-induced cellular immunogenicity may vary between populations due to differences in human leukocyte antigen (HLA) diversity and, hence, may play a critical role in the protection